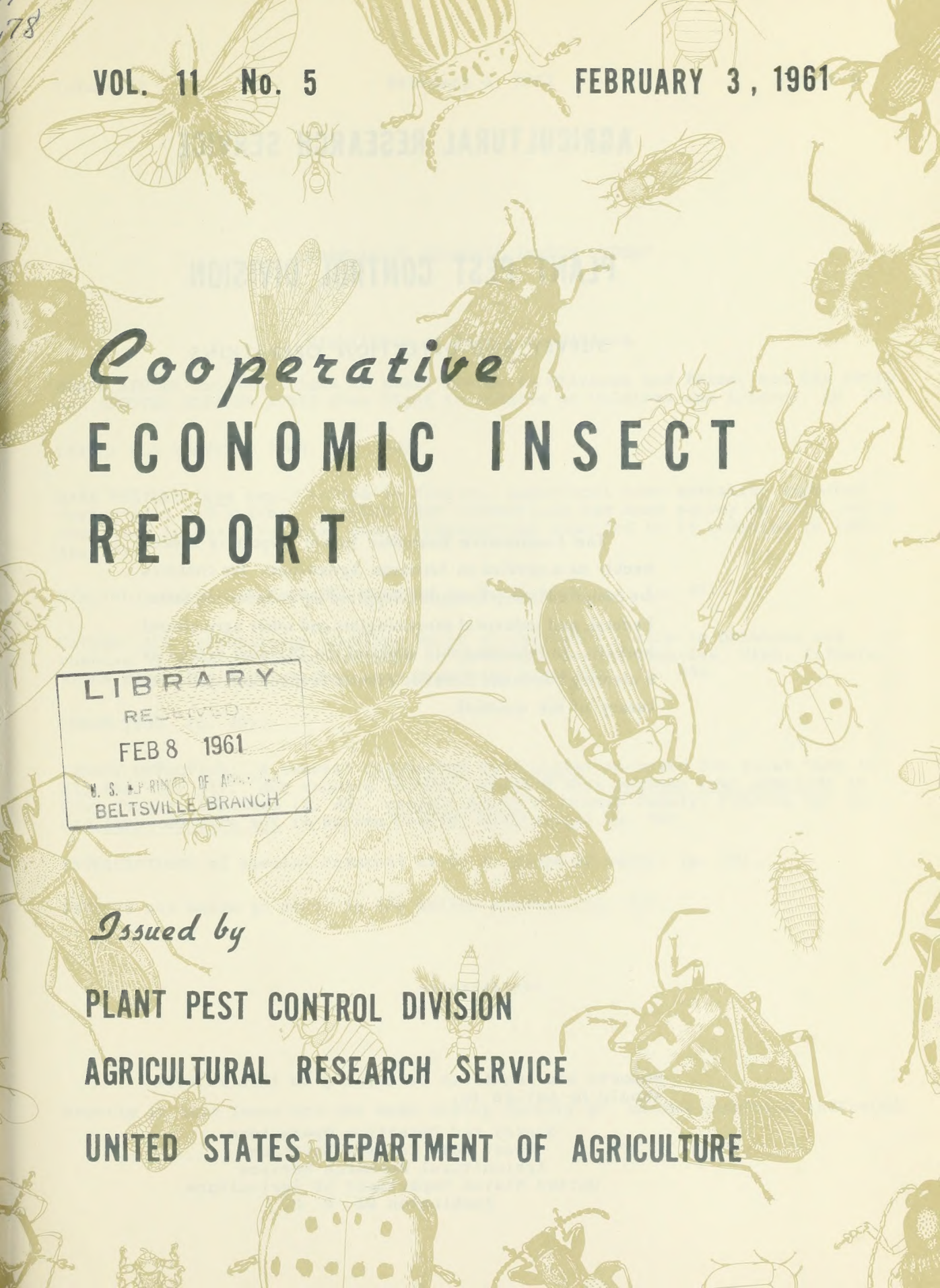


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VOL. 11 No. 5

FEBRUARY 3, 1961



Cooperative ECONOMIC INSECT REPORT

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Issued by

PLANT PEST CONTROL DIVISION

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Survey and Detection Operations
Plant Pest Control Division
Agricultural Research Service
United States Department of Agriculture
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

GRAIN APHIDS continue light in small grains in Oklahoma and Texas; and PEA APHID and SPOTTED ALFALFA APHID also light in alfalfa in Oklahoma and Arizona. (p. 43).

CHINCH BUG SURVEY - 1960. (p. 44).

BARK BEETLES (Ips spp.) active in Florida; additional tree mortality expected during next 4-5 months. EASTERN TENT CATERPILLAR egg mass survey on wild cherry completed in West Virginia; heavy infestations expected in 15 counties in 1961. (p. 46).

Distribution of BLACK-HEADED BUDWORM in North America. (p. 47).

CATTLE LICE infestations continue heavy on untreated cattle in Oklahoma and rubbing by some cattle conspicuous in Davis and Morgan Counties, Utah. Infestations generally lighter than past season in Arkansas. (p. 48).

CORRECTION (p. 49).

INSECT DETECTION: A tabanid (Hybomitra difficilis) recorded for first time in Florida. (p. 47). New country records reported were soybean cyst nematode in Clay County, Arkansas (p. 43), camphor scale in Orange County, Florida (p. 46), and imported fire ant in Warren County, Mississippi (p. 48).

INTERCEPTIONS of special interest at U. S. ports of entry. (p. 50).

INSECTS not known to occur in the United States. (p. 51).

Reports in this issue are for week ending January 27, unless otherwise indicated.

WEATHER OF THE WEEK ENDING JANUARY 30

The week's weather east of the Rocky Mountains was featured by extreme cold which has persisted since January 20. In some northeastern sections this is the longest period of severe cold on record. During the week subzero minima were recorded as far south as Denver, Colorado; St. Louis, Missouri; Nashville, Tennessee; and Richmond, Virginia. Langdon, North Dakota, reported the week's lowest temperature east of the Rockies, -40° , and Caribou, Maine, the lowest in the Northeast, -29° . In extreme northern areas, even maximum temperatures were below zero at some stations on a number of days. Freezing extended over most of the South, with only Brownsville, Texas, and the southern half of the Florida Peninsula escaping. Temperatures for the week averaged 6° or more below normal virtually everywhere east of the Continental Divide, and generally from 15° to 20° below in the Mississippi and Ohio Valleys and interior areas of the Northeast. In the Far West, temperatures for the week averaged slightly below normal immediately west of the Continental Divide to a few degrees above normal along the Pacific coast.

Significant amounts of precipitation nearly all occurred in the Pacific States and extreme southern areas. Precipitation fell almost daily in Gulf coastal areas and weekly totals exceeded an inch from Louisiana to South Carolina. A blizzard occurred in north and central Texas early in the week, with 3 to 6 inches of snow and freezing rain in northern sections of the State on the 25th, ending in central portions on the 25th and 26th. Freezing rain also occurred from Louisiana to the Carolinas, and was severe enough in north-central Georgia on the 25th to damage power and communication lines.

Precipitation in the Far Southwest fell about midweek as a Pacific storm moved across California, Arizona and New Mexico. From 1 to 2 inches of rain were measured in the Central Valley of California, but snowfall in the Sierras was light. The storm brought beneficial amounts of moisture to Arizona and New Mexico, with over a foot of snow reported in the mountains of the latter State. Drought continued in the Great Basin, and with little or no snowfall in the central and northern Rocky Mountains, snow depths there remained below normal. (Summary supplied by U. S. Weather Bureau).

CEREAL AND FORAGE INSECTS

GREENBUG (Toxoptera graminum) - OKLAHOMA - Populations continued at low level (less than 10 per linear foot) in practically all fields of small grain surveyed throughout State. Infestations ranged from 50 to 150 per linear foot in 6 fields in southwestern Beckham County and 25 per linear foot in few fields in Kingfisher County. Several other species of aphids present in approximately 90 percent of fields infested by greenbug. (Okla. Coop. Sur.). TEXAS - Infestations ranged from none to very light in fields of small grains checked in 10 central and northeast central counties. (Newton).

ENGLISH GRAIN APHID (Macrosiphum granarium) - OKLAHOMA - Continued common in fields of small grain in all areas of State. Infestations continued low, less than 10 per linear foot. (Okla. Coop. Sur.).

APPLE GRAIN APHID (Rhopalosiphum fitchii) - OKLAHOMA - Light, generally less than 10 per linear foot, in approximately 50 percent of small grain fields. (Okla. Coop. Sur.).

CORN LEAF APHID (Rhopalosiphum maidis) - OKLAHOMA - Occasional to limited numbers, 0-5 per linear foot, in approximately one-fifth of small grain fields. (Okla. Coop. Sur.). CALIFORNIA - Medium infestation on barley cover crop in San Marcos, San Diego County. (Cal. Coop. Rpt.).

A CUTWORM - OKLAHOMA - Light numbers of an unidentified species present in limited number of alfalfa and small grain fields in southwest and west central areas. (Okla. Coop. Sur.).

SOUTHWESTERN CORN BORER (Zeadiatraea grandiosella) - OKLAHOMA - A check of a limited number of cornstalks in a field in Beckham County showed 40 percent of stalks girdled. Ninety percent of larvae alive. (Okla. Coop. Sur.).

WINTER GRAIN MITE (Penthaleus major) - TEXAS - Infestations ranged from none to very light in small grain fields checked in 10 central and northeast central counties. (Newton).

LYGUS BUGS (Lygus spp.) - ARIZONA - Counts in central area alfalfa averaged 3-5 adults per 10 sweeps. (Ariz. Coop. Sur.).

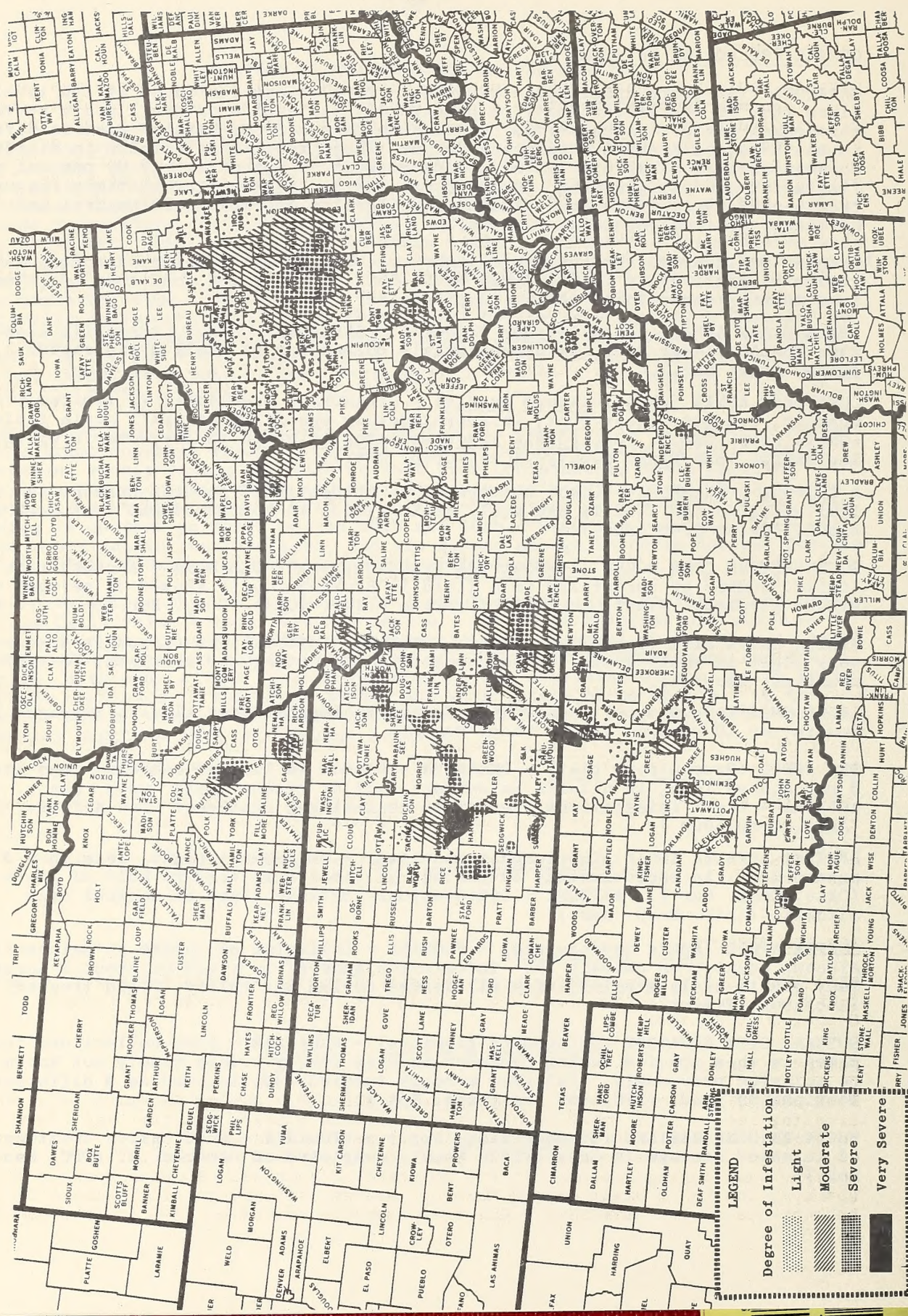
PEA APHID (Macrosiphum pisi) - OKLAHOMA - Common in limited numbers, less than 5 per square foot, in alfalfa in western half of State. (Okla. Coop. Sur.). ARIZONA - Light infestations present in central and southwest area alfalfa. (Ariz. Coop. Sur.).

SPOTTED ALFALFA APHID (Therioaphis maculata) - OKLAHOMA - Light, less than 5 per square foot, in approximately 50 percent of alfalfa in western half of State. (Okla. Coop. Sur.). ARIZONA - Infestations continue light in central area alfalfa. (Ariz. Coop. Sur.).

COWPEA APHID (Aphis medicaginis) - FLORIDA - Collected on lupine at Gainesville, Alachua County, on January 18. Infestation general in field of about 2 acres. Many plants badly stunted, with all leaves curled and rolled. Field treated. (Robinson, Tissot).

SOYBEAN CYST NEMATODE (Heterodera glycines) - ARKANSAS - Five collections determined as this species during December in Clay County. This county not known to be infested previously. Infested acreage totaled 448; located on 4 different sections of land. (PPC, So. Reg.; Dec. Rpt.).

WHITE-FRINGED BEETLES (Graphognathus spp.) - VIRGINIA - Eradication treatment of infested acreage in Greensville County completed on December 6. (PPC, East. Reg.).



FRUIT INSECTS

MEXICAN FRUIT FLY (Anastrepha ludens) - CALIFORNIA - Trapping operations in San Diego and Imperial Counties during December negative. Larval examinations of grapefruit, guava and sapote in San Diego County also negative. (PPC, West Reg.; Dec. Rpt.). TEXAS - Collections in 9 southern counties negative during December. (PPC, So. Reg.). MEXICO - Results of trap inspections during December at Tijuana, Tecate, Ensenada and Mexicali, Baja California, were negative. Larval inspections in Tecate and Mexicali also negative. (PPC, Mex. Reg.; Dec. Rpt.).

MEDITERRANEAN FRUIT FLY (Ceratitis capitata) - MEXICO - Traps were installed at Arriaga and Tonala, Chiapas. By the end of December, 1,448 traps were in service, distributed as follows: Tuxtla Gutierrez and vicinity, 323; Comitán and vicinity, 250; Tapachula and vicinity, 875. Most traps were inspected twice during December, with negative results. (PPC, Mex. Reg.; Dec. Rpt.).

CITRUS BLACKFLY (Aleurocanthus woglumi) - MEXICO - Survey crews inspected 72,169 citrus trees on 1,001 properties in the chemical control and free zones in the states of Nuevo Leon, Sonora and Baja California, with negative results. Treatments of infested trees continued in Nuevo Leon. In the biological control zone in the state of Tamaulipas, light infestations found in municipios of Guemez and Padilla. Apparently all infestations in these areas being well controlled by parasites. (PPC, Mex. Reg.; Dec. Rpt.).

OLIVE SCALE (Parlatoria oleae) - CALIFORNIA - Heavy, local infestation on prune in Richfield, Tehama County. (Cal. Coop. Rpt.).

PECAN WEEVIL (Curculio caryae) - NORTH CAROLINA - Injured nuts, believed to be caused by this species, received from Washington County. (Jones, Farrier).

TRUCK CROP INSECTS

CABBAGE APHID (Brevicoryne brassicae) - GEORGIA - Light infestations on cabbage in Colquitt, Thomas, Brooks and Lowndes Counties. (Johnson).

DIAMONDBACK MOTH (Plutella maculipennis) - GEORGIA - Light to moderate infestations on cabbage in Colquitt, Thomas, Brooks and Lowndes Counties. (Johnson).

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - GEORGIA - Light infestations on turnips in Colquitt, Thomas and Brooks Counties. (Johnson).

A THRIPS (Frankliniella occidentalis) - ARIZONA - Infestations averaging 2-4 per head present in central area lettuce. (Ariz. Coop. Sur.).

TOBACCO INSECTS

VEGETABLE WEEVIL (Listroderes costirostris obliquus) - GEORGIA - Light infestations on tobacco in the plant bed in Colquitt, Thomas, Brooks and Lowndes Counties. (Johnson).

COTTON INSECTS

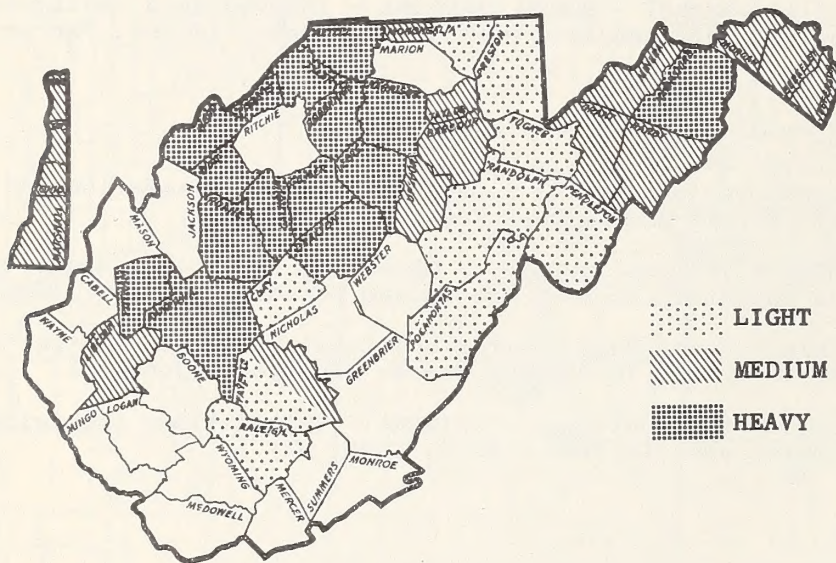
PINK BOLLWORM (Pectinophora gossypiella) - ARIZONA - During December, gin trash sampling recovered a total of 193 larvae; 119 in eastern counties and 74 in central counties. In the central counties, 71 larvae found in Pinal County, 2 in Maricopa County and 1 in Pima County. (PPC, West. Reg.). TEXAS - First infestations of 1960 season found during December in the Counties of Brewster, Brown, Crockett and Upton in the Pecos District and Hockley, Motley, Palo Pinto and Stephens in the Lubbock District. TENNESSEE - Gin trash surveys negative. (PPC, So. Reg.; Dec. Rpt.).

MEXICO - Gin trash inspections completed December 15 in state of Baja California and at San Luis R. C. in state of Sonora, with negative results. (PPC, Mex. Reg.; Dec. Rpt.).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

BARK BEETLES - FLORIDA - In pulpwood stands where salvage operations complete, bark beetles do not seem to present a problem. However, in stands where trees were practically root-sprung and trees leaning at an angle of 15° or more from the vertical, Ips spp. were quite active. Broods in these trees mostly in last larval instar or in pupal stage. Emergence will probably occur within next 2 weeks. In these stands, Ips grandicollis seemed most prevalent, although I. calligraphus and I. avulsus also present. Stands consisting mainly of saw-timber or poles producing large numbers of I. calligraphus and I. grandicollis. These 2 species found in adult stage and pupal stage and will probably emerge within next 10 days. Beetles quite large and will probably be capable of laying large numbers of eggs. As much of wind-thrown material has been salvaged or is no longer suitable for brood production, emerging beetles will probably attack standing timber in many cases; consequently, additional tree mortality can be anticipated for next 4-5 months - possibly longer. (McCowan, Jan. 16).

EASTERN TENT CATERPILLAR (Malacosoma americanum) - WEST VIRGINIA - Egg mass survey on wild cherry completed. The anticipated infestations in 1961 are indicated on the map below. (W. Va. Ins. Sur.).



LEAF CRUMPLER (Acrobasis indigenella) - TEXAS - Moderate to heavy infestations on plum, peach and cherry trees in Fort Bend and Harris Counties. (Newton).

A BARK-FEEDING APHID (probably Longistigma sp.) - TEXAS - Moderate to heavy infestations on oak trees in Beaumont, Jefferson County. (Crocker).

CAMPHOR SCALE (Pseudaonidia duplex) - FLORIDA - Collected on camellia at Winter Garden, Orange County, on December 7, 1960, by L. W. Holley and R. J. Griffith. This is a new county record. (Fla. Coop. Sur.).

DISTRIBUTION OF BLACK-HEADED BUDWORM (*Acleris variana* (Fernald))
IN NORTH AMERICA



Map from Forest Pest Leaflet 45 (March 1960),
Forest Service, U. S. Department of Agriculture

COTTONY-CUSHION SCALE (Icerya purchasi) - TEXAS - Moderate to heavy infestations on pittosporum in Bastrop County. (Newton).

A BAMBOO APHID (Myzocallis arundinariae) - CALIFORNIA - Heavy population on golden bamboo, Phyllostachys aurea, in La Mesa, San Diego County. (Cal. Coop. Rpt.).

A SCARAB (Phileurus truncatus) - FLORIDA - Collected on Canary date palm, Phoenix canariensis, at Ft. Myers, Lee County, on January 18 by H.W. Collins, Jr. Several larvae and one adult found in trunk of palm and are possibly responsible for death of the tree. This is first time this species reported as injurious and this habit almost identical to that of Strategus splendens. (Fla. Coop. Sur.).

MITES - NEW MEXICO - Undetermined species severely damaged bulbs and corms in a number of nurseries in southeastern counties. (N. M. Coop. Rpt.).

INSECTS AFFECTING MAN AND ANIMALS

COMMON CATTLE GRUB (Hypoderma lineatum) - OKLAHOMA - Although infestations continued at a high level, numbers have dropped slightly from counts of previous week. Numbers in yearling steers averaged 21 per animal (maximum 61 per animal) in Woodward County and 22 per animal (maximum 54 per animal) in Harper County. Counts on 600-800-pound steers averaged 8-12 per animal in Bryan and Marshall Counties. (Okla. Coop. Sur.). ARKANSAS - Counts range 1-30 and average 5 per head in untreated cattle in northwest area. Grubs average less than one per head in cattle treated with systemic insecticides. (Ark. Ins. Sur.).

TABANIDS - FLORIDA - Six female specimens of Chrysops hyalina collected at Glen St. Mary, Baker County, on April 13, 1960, by E. W. Holder; and one female of C. carbonarius and 2 females of Hybomitra difficilis collected at Torreya State Park, Liberty County, on April 12, 1960, by H. V. Weems, Jr. The collection of H. difficilis is a southern extension of a boreal species which generally occurs in hilly to mountainous regions. This is a new state record. All determinations made by Dr. C. B. Philip, Rocky Mountain Lab., Hamilton, Montana. (Fla. Coop. Sur.).

CATTLE LICE - OKLAHOMA - Heavy infestations common on untreated cattle throughout State. (Okla. Coop. Sur.). UTAH - Causing conspicuous rubbing by some cattle in Davis and Morgan Counties. (Knowlton). ARKANSAS - Infestations light to moderate in northwest and in Jackson County in northeast. In general, infestations lighter than in 1960. (Ark. Ins. Sur.).

HOG LOUSE (Haematopinus suis) - OKLAHOMA - Heavy numbers common on untreated hogs in several areas of State. (Okla. Coop. Sur.).

TICKS - OKLAHOMA - A check of 3 deer from Comanche County showed an average of 40 Dermacentor albipictus and 15 Ixodes scapularis per animal. (Okla. Coop. Sur.). ARKANSAS - Infestations of I. scapularis moderate to heavy in northwest area. (Ark. Ins. Sur.).

STORED-PRODUCT INSECTS

KHAPRA BEETLE (Trogoderma granarium) - ARIZONA - Two infestations found in Maricopa County during December. (PPC, West. Reg.; Dec. Rpt.). NORTH DAKOTA - Survey conducted at Minot, Devils Lake and Mayville. Six commercial grain firms inspected, with negative results. (N. D. Ins. Sur., Jan. 20). NEW MEXICO - Surveys during January negative. (N. M. Coop. Rpt.).

RICE WEEVIL (Sitophilus oryzae) - TEXAS - Heavily infested stored ear corn in Tyler County. (Currie).

MISCELLANEOUS INSECTS

IMPORTED FIRE ANT (Solenopsis saevissima richteri) - MISSISSIPPI - Infestation found at Vicksburg confirmed during December. First record in Warren County. (PPC, So. Reg.). NORTH CAROLINA - Two minor infestations found in Brunswick County. One is 2 miles from nearest known infestation. (Bowen).

BROWN-BANDED COCKROACH (Supella supellectilium) - MARYLAND - Infesting homes at Baltimore, and at Landover Hills, Prince Georges County. (U. Md., Ent. Dept.).

BROWN SPIDER BEETLE (Ptinus clavipes) - CALIFORNIA - Heavy population in a residence in Chico, Butte County. (J. Harroun).

CLOVER MITE (Bryobia praetiosa) - NORTH CAROLINA - Numerous outside doors and windows of homes in Iredell County. (Ivey, Farrier).

BROWN DOG TICK (Rhipicephalus sanguineus) - ARIZONA - Heavy populations continue to be a problem to some central area homeowners. (Ariz. Coop. Sur.).

CORRECTION

CEIR 11(1):11 - STATE CLEARING OFFICE - NEVADA - Address should read as follows: Mr. Lee M. Burge, Director, Division of Plant Industry, Department of Agriculture, P. O. Box 1209, Reno.

LIGHT TRAP COLLECTIONS

	Agrotis ippsilon	Feltia subterranea	Prodenia sp.
<u>FLORIDA</u>			
Quincy 1/23	2	6	
Homestead 1/18	3	2	6
<u>SOUTH CAROLINA</u>			
Charleston 1/23-29		4	

INTERCEPTIONS OF SPECIAL INTEREST AT U.S. PORTS OF ENTRY

Some important interceptions that were reported November 30, 1960, by the Plant Quarantine Division, ARS, USDA follow. These reports are based on identifications received from Federal taxonomists at the U.S. National Museum during the month of November, 1960. They do not necessarily represent interceptions taken during the month, but do include any of special interest from recent months that were not previously reported.

KHAPRA BEETLE (Trogoderma granarium) 7 times; in stores at Baton Rouge, Louisiana, one time; at Galveston, Texas, one time; at Port Arthur, Texas, one time; at San Pedro, California, one time; at Wilmington, North Carolina, 2 times; and in cargo of "Myrobalan nuts" from India destined for Maryland at Baltimore, Maryland, one time.

MEDITERRANEAN FRUIT FLY (Ceratitis capitata (Wied.)) 19 times; at Boston, Massachusetts, one time; at Hawaii 4 times, 3 times in baggage destined for California and in mail one time destined for Texas; at Miami, Florida, one time in stores; at New Orleans, Louisiana, one time in stores; at New York, New York, 9 times, in baggage 8 times destined for Connecticut, District of Columbia, Michigan and New York and one time in stores; at San Juan, Puerto Rico, 3 times in stores.

MEXICAN FRUIT FLY (Anastrepha ludens) 17 times in baggage from Mexico, including 2 destined for California; at Brownsville, Texas, 8 times; at Calexico, California, one time; at El Paso, Texas, one time; and at Laredo, Texas, 7 times.

WHITE GARDEN SNAIL (Theba pisana (Muller)) twice on military cargo from the Mediterranean area destined to various military bases in the U. S. at New Orleans, Louisiana.

A STENOMID (Stenoma catenifer Wlsm.) in avocados in baggage from Mexico at Brownsville, Texas, and in avocado seed in baggage in transit to Israel at Miami.

A COSSID (Dyspessa ulula (Bkh.)) in garlic in cargo at San Juan, Puerto Rico.

A FRUIT FLY (Dacus sp., probably dorsalis) in guava in baggage from Hawaii at Los Angeles, California.

A FRUIT FLY (Dacus sp.) in avocado in airplane quarters from an unknown origin at Boston, Massachusetts.

AN OLETHREUTID (presumably Grapholitha janthiana (Dup.)) in apple in baggage destined for Indiana at New York, New York.

A PYRAUSTID (Evergestis forficalis (L.)) on cauliflower in stores at New York, New York.

A GEOMETRID (Sterrhia inquinata (Scop.)) with dried herbs in baggage at New York, New York. This geometrid is reported injurious to stored dried vegetables and herbs in parts of southern Europe.

A TORTRICID (Hemimene juliana (Curt.)) in chestnuts in baggage at New York, New York.

EUROPEAN CHERRY FRUIT FLY (Rhagoletis cerasi (L.)) in airplane baggage; at New York, New York, 2 times; at Detroit, Michigan, one time.

A PHALONIID (Phalonia zephyrana (Treit.)) in carrots in stores at Philadelphia, Pennsylvania, 2 times and at Miami, Florida, one time.

PINK BOLLWORM (Pectinophora gossypiella) 3 times in baggage; one time from Mexico at Brownsville, Texas; one time from Brazil destined for Alabama at Miami, Florida; and one time from the Dominican Republic at San Juan, Puerto Rico.

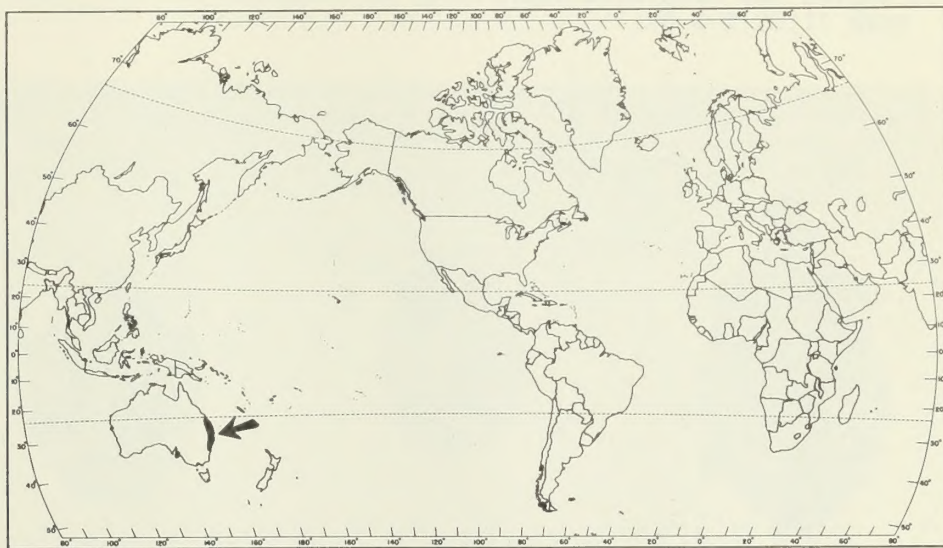
INSECTS NOT KNOWN TO OCCUR IN THE UNITED STATES

BRONZE ORANGE BUG (Rhoecocoris sulciventris Stal)

Economic Importance: This pentatomid is a major pest of citrus in areas of southeastern Queensland and the north coast of New South Wales, Australia. It is essentially a pest of vigorous citrus trees, feeding by sucking sap from young and tender shoots and from the leaf, fruit and flower stalks. Fruit and leaf spotting is a secondary form of injury caused by the caustic excretions emitted by the bugs when disturbed. Excretions of the insect can also be a nuisance to man, causing inflammation of the skin and severe irritation of the eyes. Repeated attacks on citrus trees cause cumulative losses. After a period of a few years following heavy infestations, trees show little growth and become incapable of carrying a crop. Losses of 20 percent are about average for heavily infested trees, with losses of 30 percent not uncommon.

Distribution: New South Wales and Queensland, Australia (Coastal areas; S. E. Queensland and N. New South Wales).

Hosts: Attacks all commercial varieties of citrus in Australia, but orange appears to be the preferred host. The bug also feeds and breeds on Citrus australis, a wild, noncultivated, native orange.

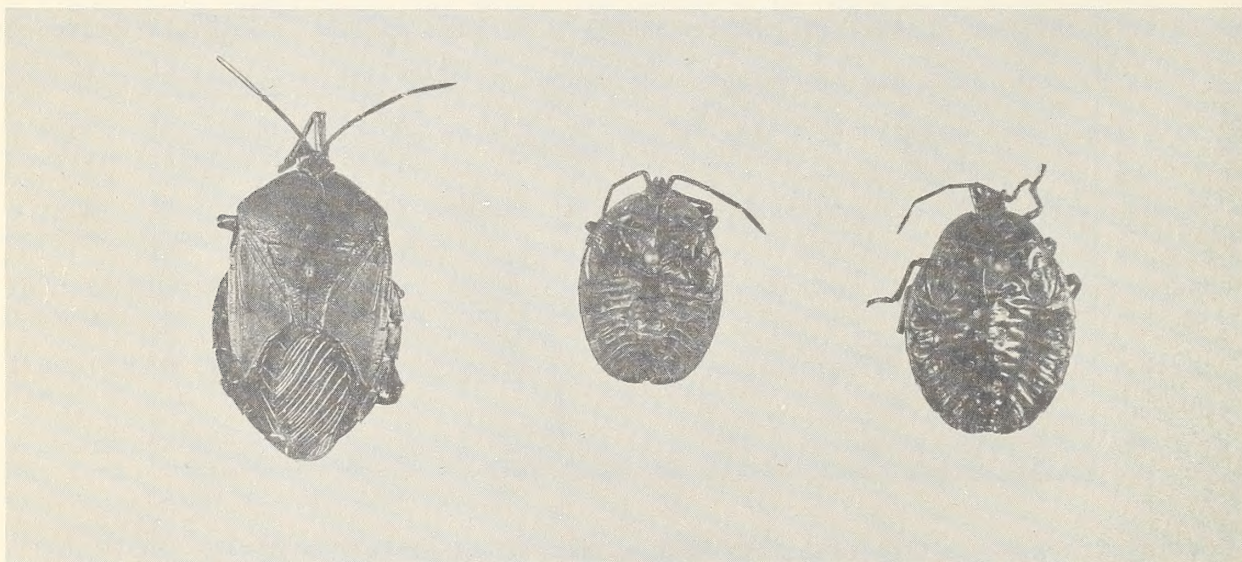


General Distribution of Rhoecocoris sulciventris Stal

Life History and Habits: Eggs are laid in February and March and hatch in just over 8 days. First-instar nymphs congregate for 5-6 days before molting, then second-instar nymphs scatter to protected places underneath the leaves on the tree and remain dormant, without feeding, throughout the winter, which is approximately 7 months. During this latter stage, the insects cling very tightly

to the leaves and cannot be dislodged by even very strong jarring of the limbs. Feeding commences with the advent of warm weather and third-instar nymphs begin to appear in numbers in early September. A foul aroma is associated with the pest from this stage onward. The last 3 instars occupy about 3 weeks or slightly longer and adults appear in November, but are not numerous until December. Feeding and mating take place in December and January and oviposition occurs in February. Eggs are laid in batches of 14 in a characteristic formation, each batch being in 4 lines, with the 2 outside rows having 3 eggs each and the 2 inside rows with 4 each. Occasionally incomplete batches are found. Eggs are laid on leaves as a rule, but occasionally batches may be found on fruits or nearby plants. Both surfaces of the leaves are used as oviposition sites. Only one complete generation a year has been recorded. In summary, the life cycle consists of 7 stages; the egg, 5 nymphal instars and the adult.

Description: EGG - Spherical, shiny and light green to yellow in color; slightly less than one-eighth of an inch in diameter. NYMPHS - Size and shape varies with each instar. Color varies from glossy green in first instar; light green, yellow or grayish in second instar; to a shining green, changing to lighter green, orange and brilliant pink, in the third instar. The size varies from three-sixteenths of an inch long in first instar to seven-eighths of an inch in fifth instar. ADULT - Young adults light bronze above and reddish-brown beneath; older forms black above and dark brown beneath. Legs reddish-brown, becoming lighter and almost red at extremities. Head small and eyes lighter brown than surrounding parts and rather conspicuous. Antennae reddish-brown at base; first and second segments orange. Upper surface of abdomen orange or reddish towards center and dark brown to black at margins. Length, one inch; width, five-eighths of an inch at greatest width of abdomen. (Prepared in Survey and Detection Operations in cooperation with other ARS Agencies). CEIR 11(5):2-3-61.



Adult and Nymphs of Rhoecocoris sulciventris Stal

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